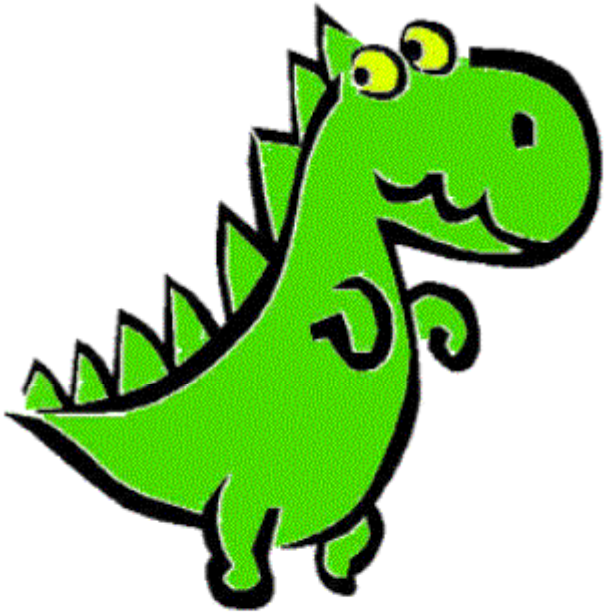
User's Manual



HDD Guarder™

Recovery Card

http://www.HDDGuarder.com

Disclaimer

We have done our best to ensure that the material in this manual is both accurate and useful; however, please be aware that errors maybe exist, and it dose not make any guarantee concerning the accuracy of information found here or in the use to which it may be put.

Before you install HDD Guarder, please backup all your important files and ensure that it is stored separately.

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Chapter 1 Introduction

1-1 Function

- ✧ An express installation can be performed by pressing the <**Enter**> key 3 times, it cost you only five seconds.
- ✧ Once hard disk data is destroyed by any mistake, virus and/or hacker, only press <**9**> key one time to recover it in half a second.
- ✧ Support IDE and SCSI hard disk controller.
- ✧ Support PIO, DMA33, DMA66, Ultra DMA66, ATA-100 and Ultra ATA-100 IDE interface.
- ✧ Support FAT16/16E, FAT32/32E, NTFS/HPFS partitions and file systems.
- ✧ Support 256GB hard disk.
- ✧ Guarder whole hard disk or selected partitions.
- ✧ Support multi-OS booting by System Commander and multi-bootable-partition booting by BootMagic.
- ✧ Support not only DOS, Windows 3x/95/98/ME, but also Windows NT/2000/XP server better.
- ✧ Guard CMOS intelligently.

1-2 Features

- ✧ When first set up, saved, or recovered, Guarder uses only 5KB of hard disk; when running , it uses 1.33MB of hard disk at most.
- ✧ Dynamic Virtual Hard Disk Drive (DVHDD) is one created and managed by Guarder in guarded partitions for new data saving. Theoretically Guarder supports a DVHDD of 1207GB, practically it supports a 12GB one, so it better supports Windows NT/2000/XP server and ensures that the Defrag routine can run and large data can be saved when any partition is guarded.
- ✧ The magic Save function is best suitable for such application environment about government, business, institute, home, finance, securities, accounting and the military. When any partition is guarded, all

writing on it will be recorded as new data. Once we use recovery or uninstallation function, all new data will be cleaned. Guarder provides Save function to write data onto hard disk.

- ✧ Anti-Evil-Attack function is best suitable for cyber cafe and the computer labs of schools and colleges. When the attacker deletes all installation information on the guarded partitions, and reboots the computer, Guarder will enter a Security Check routine. OS can only be booted when the manager enters the correct serial-number password, or the computer will be automatically reset to prevent the attacker from destroying hard disk data further.
- ✧ Automatic-Uninstallation function is best suitable for cyber cafes and the computer labs of schools and colleges. If the Guarder card is pulled out without uninstallation, Guarder's Security Check routine will automatically uninstall itself after booting up Windows.
- ✧ By providing the two valuable functions of Anti-Evil-Attack and Automatic-Uninstallation, and shielding the booting interface, Guarder safeguards itself and hard disk better.

Chapter 2 Installation

2-1 System requirements

CPU: 386 or above
Memory: 8M or more
Hard-disk: IDE, EIDE and SCSI

2-2 Before installation

- ✧ Make sure that your computer meets the above-mentioned system requirements.
- ✧ If a similar product has been installed, remove it and its drivers.
- ✧ Scan and clean viruses with anti-virus software.
- ✧ Make sure there is no static electricity.

2-3 Start installation

There are two steps of installation (hardware installation and software installation) separately for **Guarder.**

2-3-1 Installation of driver for Windows 2000/NT/XP

(software installation)

- ✧ Boot the computer with Windows® 2000/NT/XP.
- ✧ Run Install.exe in the driver disk or CD supplied with the product.
- ✧ Reboot your computer to complete the installation.

2-3-2 Installation of Guarder card

(hardware installation)

- ✧ Make your computer turn off.
- ✧ Insert the card into one of empty PCI slots on the motherboard of the computer.
- ✧ Turn on your computer.
- ✧ Check the setting of CMOS to make sure the parameters of hard disk are

correct:

- If there is **Boot From LAN First** or similar item, **enable** it.
- Disable the **Virus Warning** item in CMOS setting.
- If there is a Hard Disk **Recovery** program in CMOS, **disable** it.

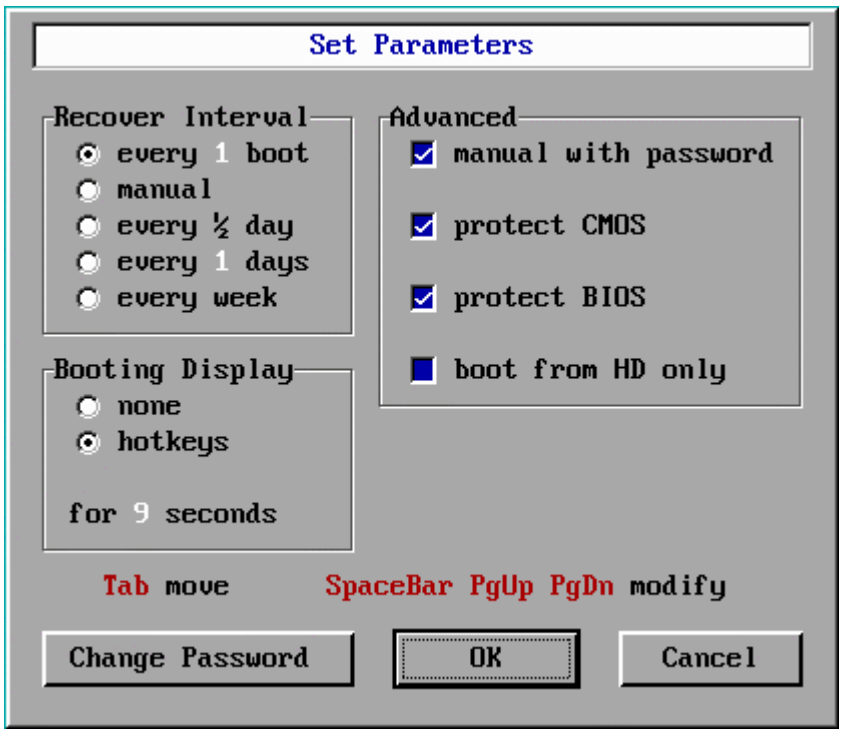
✧ Reboot your computer, the following screen (Installation menu) will appear:

HDD-Guarder 6.10.0306P
SN: 20010822.8899AABB.CCDDEEFF
http://www.HDDGuarder.com
Default password : function.
If OS is Windows NT/2000/XP, please login as Administrator and run install.exe from the provided Driver CD/Diskette first.
For Quick Installation, press <Enter> key 3 times with default parameters loaded.
For Normal Installation, press <Install> button NOW.
Install
Cancel

(Installation Menu)

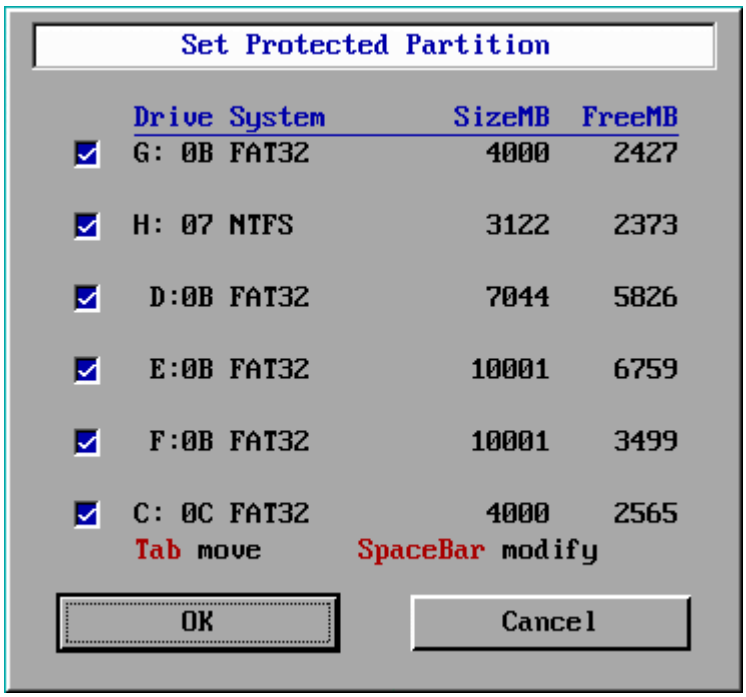
✧ Press <**Enter**> key three times, express installation will be finished with default parameters setting.

✧ Press **Install**, the following screen (Set Parameters Menu) will appear:



(Set Parameters Menu)

- ✧ Press <**Tab**> key to move.
- ✧ Press <**Space Bar**> or <**PgUp**> <**PgDn**> to modify the setting.
- ✧ Press **OK** to save the setting and press **Cancel** to give up the change of setting.
- ✧ After pressing **OK**, the following screen will appear (Set Protected Partition Menu):



(Set Protected Partition Menu)

- ✧ Press <**Tab**> key to move.

- Press <**Space Bar**> to modify the setting.
- Press **OK** to save the setting and press **Cancel** to give up the change of setting.
- After pressing **OK**, The computer will reboot automatically. Now, you have finished the installation of the **Guarder.**

2-4 Express test

- Create a folder at the root of drive C, and create another at Windows desktop.
- Reboot your computer, if the folders disappear, it means that the Guarder functions well and has automatically finished recovery.

Chapter 3 Basic Operation Guide

3-1 Definition of terms

- **Protected Mode**: General operators such as students are recommended to use this mode. All useful data, files or programs are set to be protected and will be protected under this mode. All modification of the protected data will be recovered after **Restore Data** operation is executed.

- **Supervisor Mode:** The data on hard disk is not protected under this mode, the operator can really install, uninstall, upgrade, etc. even if the drive is set to be protected.

- **Save Data:** If useful data are created under protected mode and need to be saved, you can perform this operation to update the changes you made during last session.

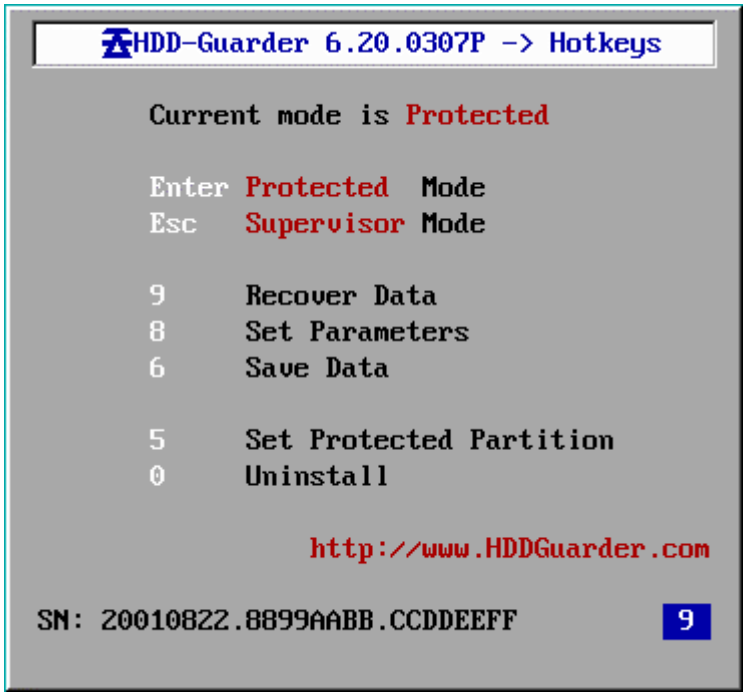
- **Recover Data:** No matter how do you set the parameter, you could recover data by press this hotkey <**9**> key.

- **Manual with password**: If you select this item, you have to input password after press <**9**> key, otherwise, you don't need password to recover data.

3-2 Operation Guide

3-2-1 Hotkeys Menu

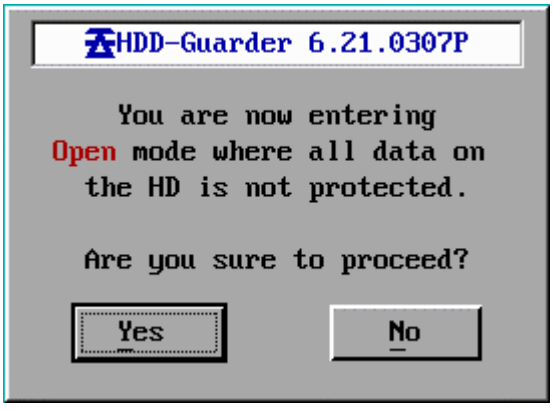
When booting your computer with HDD Guarder installed completely, the following screen (Hotkeys Menu) will appear:



(Hotkeys Menu)

- ✧ Pressing any key could stop the time counting.
- ✧ Press <**Enter**> key, you will enter protected mode, in this mode, all changes in the protected partitions will be protected.
- ✧ Press <**Esc**> key, the following screen will appear:

After inputting the correct password, press <**Enter**> key, the following screen will appear:



Press **Yes**, you will enter Operating System.

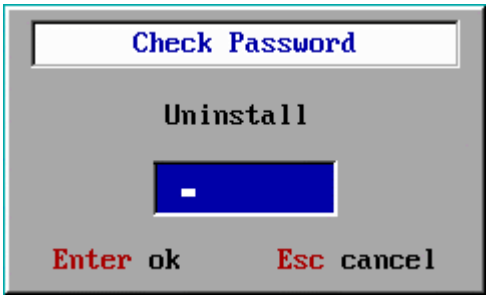
✧ Press <**5**> key to enter Set Protected Partition Menu, in which you could set protection or not for each drive.

After pressing <**5**> key, the following screen will appear:

After inputting the correct password, press <**Enter**> key to enter Set Protected Partition menu.

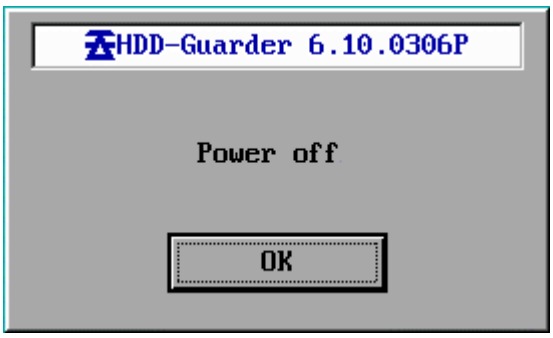
✧ Press <**0**> key to uninstall Guarder.

After pressing <**0**> key, the following screen will appear:



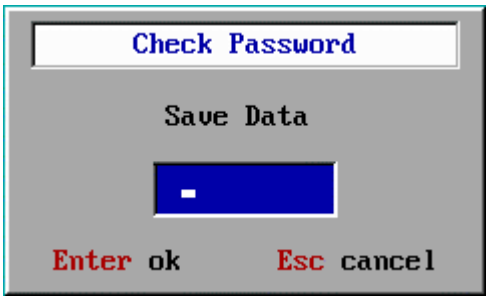
After inputting the correct password, press <**Enter**> key, the following screen will appear:

If you click **Yes**, the Guarder will automatically delete all the installation information, then the following screen appears:



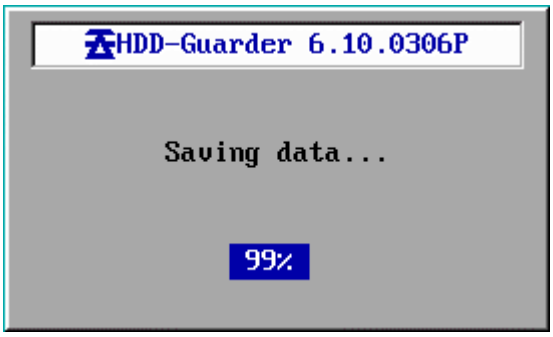
✧ Press <**6**> key to save the changes you made after last saving.

After pressing <**6**> key, the following screen will appear:



After inputting the correct password, press <**Enter**> key, the following screen will appear:

Press **Yes**, the following screen will appear:

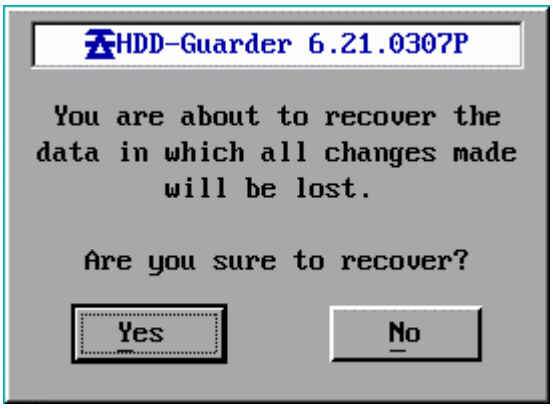


then the computer will automatically reboot.

✧ Press <**9**> key to recover the changes.

After pressing <**9**> key, the following screen will appear:

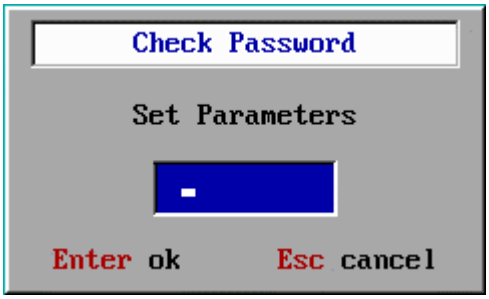
After inputting the correct password, press <**Enter**> key, the following screen will appear:


HDD-Guarder 6.21.0307P
You are about to recover the data in which all changes made will be lost.
Are you sure to recover?
Yes
No

After pressing **Yes**, you will enter into Operating System.

✧ Press <**8**> key to enter Set Parameters menu, in which you could set the parameters of HDD Guarder.

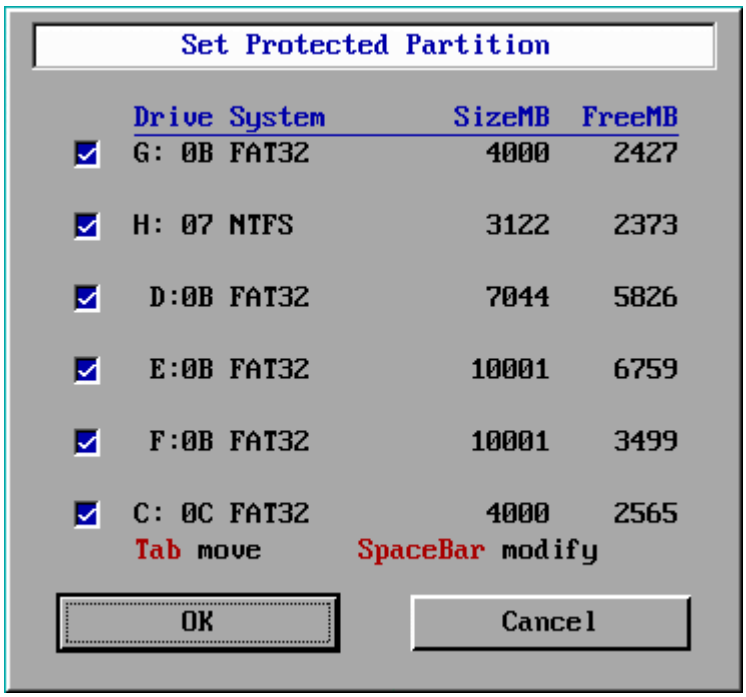
After pressing <**8**> key, the following screen will appear:



After inputting the correct password, press <**Enter**> key to enter Set Parameter menu.

3-2-2 Set Protected Partition Menu

Press <**5**> key in Hotkeys Menu, after inputting the correct password, the following screen will appear:



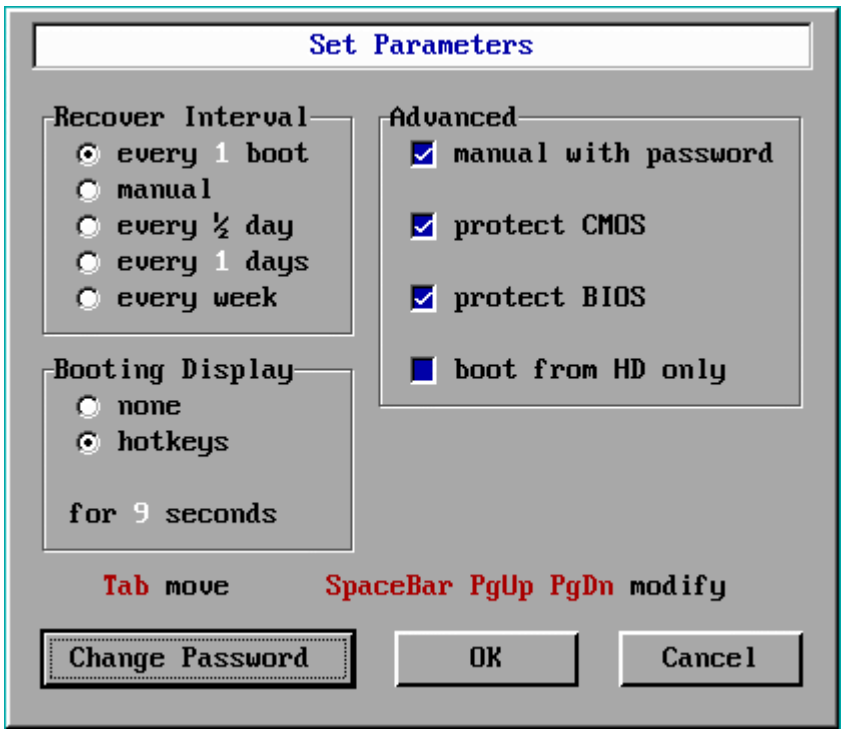
the default setting is protected all drives.

Press <**Tab**> to move and press <**Space Bar**> to mark or not mark **V** for every drive.

If there is mark of **V**, this drive will be protected, otherwise will not be protected.

3-2-3 Set Parameters Menu

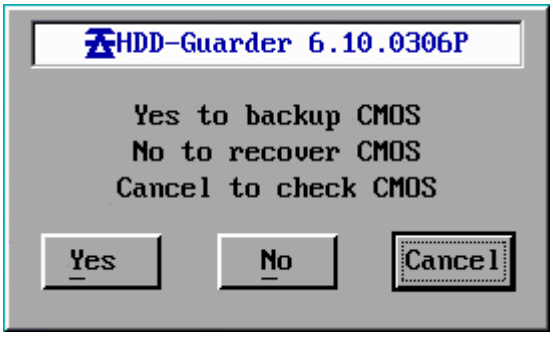
Press <**8**> key in Hotkeys Menu, the following screen will appear:



- ✧ The default settings are as the above settings.
- ✧ You could set the recover interval from every 1-99 boot, or every 1/2 day, or every 1-99 days, or every week, or manual recover.
- ✧ If you mark **V** in the item of manual with password, that means you have to input password when you press <**9**> key to recover data; otherwise, you do not need.
- ✧ If you mark **V** in the item of protect CMOS, that means the setting of CMOS is protected.
- ✧ If you mark **V** in the item of protect BIOS, the BIOS will be protected, otherwise, not be protected.
- ✧ If you mark **V** in the item of boot from HD only, that means the computer has to boot from hard disk, otherwise not.
- ✧ If you choose Booting Display as **none**, that means when the computer booting, there will be no any screen about HDD Guarder and the computer will enter directly operating system. While you could get the Hotkeys Menu by pressing <**8**> key when booting your computer.
- ✧ If you choose Booting Display as **hotkeys**, the Hotkeys menu will appear when booting your computer.
- ✧ The displaying time could be modified from 15 seconds to 1 second, the default time is 9 seconds.
- ✧ You could press <**Tab**> to move from one item to another, press <**Space Bar**> or <**PgUp**>/<**PgDn**> to modify the setting.

3-2-4 Protect CMOS

If you choose protect CMOS in Set Parameters menu, and if there are any changes for the setting of CMOS, the following screen will appear:



- ✧ Press **Yes**, the changes of CMOS will be saved.

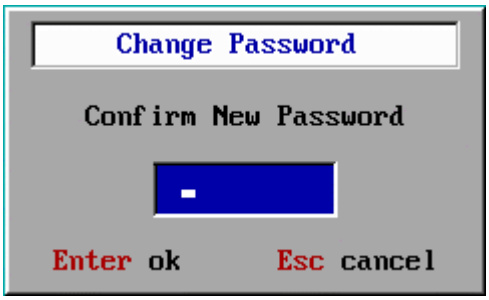
- ✧ Press **No**, the changes of CMOS will be recovered.
- ✧ Press **Cancel**, the computer will reboot three times, you could make any change for CMOM during the three reboots, and all changes will be saved permanently.

3-2-5 How to modify the password

The default password is **function**, all letters are in smaller case.

Press **Change Password** in the Set Parameters menu, the following screen will appear:

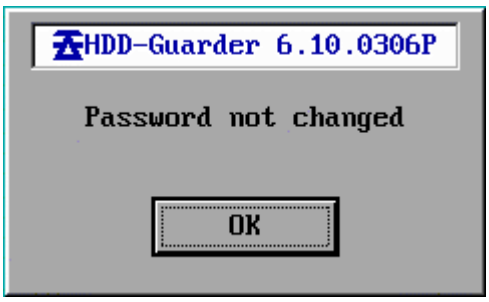
After inputting the new password, press <**Enter**> key, the following screen will appear:



Input the new password again, then press <**Enter**> key, the following screen will appear:

Press **OK**, the password is modified now.

If the two passwords you enter are not consistent, or you pressed key **Esc**, the following screen will appear to indicate that the password is not changed.



3-2-6 How to uninstall Guarder

Press <**0**> key in Hotkeys Menu, please refer to 3-2-1.

3-3 Unique Serial Number and Serial-Number Password

If you press key **F1** when entering the password, Guarder will display its serial number.

20010822.8899AABB.CCDDEEFF

- 20010822 is the manufacture date of your HDD Guarder card.
- 8899AABB.CCDDEEFF is the serial number. It is unique.

By the serial number, you can get the serial number password. The serial number password is an all-purpose password corresponding with your unique serial number, it is used in case you forgot the password, or Guarder carries security check to prevent evil-attack, and it can be only got from the distributors.

3-4 How to set Multi-Boot

3-4-1 Setting Multi-Bootable-Partition Booting by BootMagic

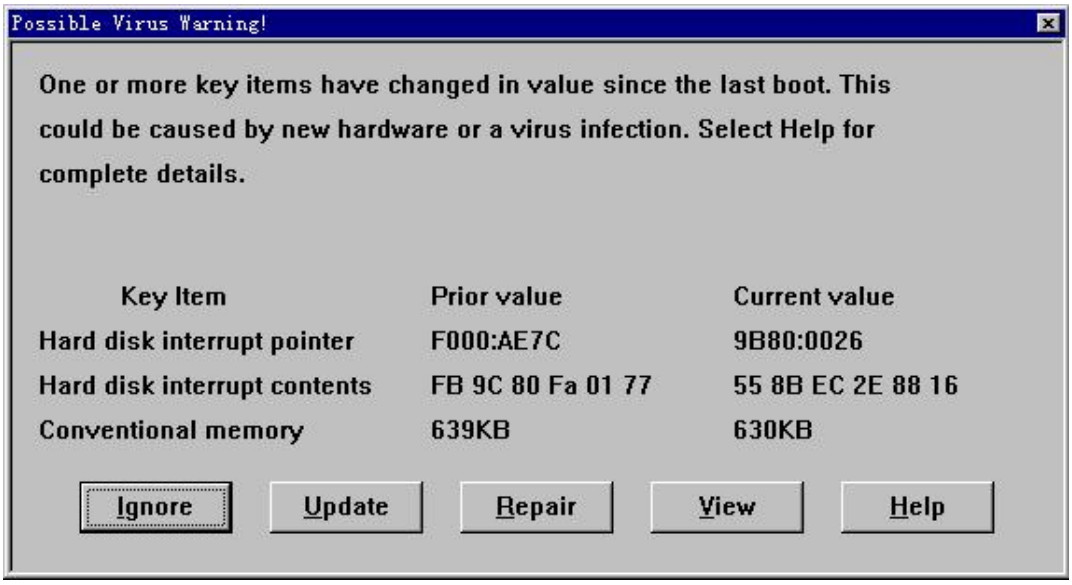
BootMagic is a software packed with PQmagic. It is specially used in installing Multi Bootable Partitions.
Please set HD partitions in PQmagic first, and then install BootMagic, OS, applications and the Guarder in this order.

3-4-2 Setting Multi-OS Booting by System Commander

At the first, install OS and applications. At the second, install System Commander. At last, install Guarder.

3-4-3 How to Skip Possible Virus Warning

At the first time System Commander starts after Guarder installation, the Possible Virus Warning window will appear as follows.



Press <**U**> key to update. Reboot the computer and save hard disk data, and then as long as you do not uninstall the Guarder, this window will not appear whenever you recover hard disk data.

Chapter 4 Troubleshooting

Legends

☹ Detailed description of the problems.

☺ Analysis of possible causes.

Ways to solve the problems.

☞ Further notes.

Caution!

I forgot the password

☺	Try default password first. If that won't do, please get the serial-number password from your distributor.

As if no Guarder card is plugged in

☹	1. I pressed Ctrl-B or <**7**> key when booting, but the computer does not respond and starts OS as usual. 2. I pressed Ctrl-B or <**7**> key and entered the Boot Mode menu, but the computer does not respond to pressing Ctrl-M or <**8**> key, the installation screen does not appear, and the computer starts OS as usual.
☺	For the first case, the possible causes may be ✧ The card is not properly plugged. ✧ The ROM address of ISA card conflicts with others, e.g. SCSI cards, and remote bootable network adapters. ✧ The power supply has poor loading capacity; the ISA slot does not meet the requirements. ✧ If the Guarder is a PCI 2 card or an All-in-One card with Ethernet

	adapter, CMOS is not properly configured. ✧ PCI 4 Guarder cannot be used with certain desktop boards and BIOS. For the second case, the possible cause may be ✧ The boot mode does not match BIOS. Please refer to Boot Mode section in the Advanced Guide chapter.
	◆ Plug the card again, or change a slot, or clean the slot/the card. ◆ Adjust the ROM address of other ISA cards if possible, otherwise change the jumpers J1 and J2 of Guarder ISA card. **Note: This will also change the boot mode of ISA Guarder.** Please refer to Boot Mode section in the Advanced Guide chapter. ◆ Retry it with another ISA card, ISA flash card, PCI card or All-in-One card. If the power supply does not work, contact your computer distributor or the manufacturer, and replace either the power supply or the computer itself. ◆ Only a PCI 2 card, or an All-in-One card which integrates Guarder and Ethernet adapter, will be affected by CMOS. This perhaps occurs when an AMI BIOS motherboard is used. Set the CMOS parameter BIOS FEATURES SETUP as follows: Set **First boot device** to **LAN**. Or set **Boot from LAN first** to **Enable**. Certain motherboards or BIOS may also require Set **PnP OS installed** to **Yes**. ◆ PCI 4 card adopts a patent technique in hardware design, so its functions should not be affected by CMOS. But with the Intel D845GEBV2/L motherboard with AMI BIOS Version RG84510A.86A.0017.P09 (released by AMI, Sept. 9th 2002), PCI 4 Guarder cannot work. **Solution**: Replace it with a PCI 2 card, and choose a proper Boot Mode, or update BIOS.
	There is little possibility that the above causes concur combinedly. Improper CMOS configuration or Boot Mode not matching BIOS perhaps occurs with motherboards using AMI BIOS.

Displaying blue screen and Windows breaks down

	◆ It has been infected with viruses. ◆ The free space in hard disks is limited. There is no cache for the Guarder. ◆ Check if Anti-Virus software or System Performance Administration software has been installed.
	✧ Recover the hard disk data, or set it to Automatic Recovery. ✧ Uninstall the Guarder, Anti-Virus software and System Performance Administration software, and then install the Guarder. ✧ Uninstall the Guarder, do defrag in hard disks. Reinstall it after the system is Ok.
	Guarder software of all versions uses patent algorithm to ensure a better guard capacity. It allows revisions of over 12GB data in the guarded partitions, and default guard covers all partitions. Guarder will guarantee a longtime stable working of Windows NT/2000/XP Professional or Server without automatic recovery.